



## Safety Data Sheet

Material Name: Methyl Bromide

### \*\*\*Section 1 - IDENTIFICATION\*\*\*

<b>GHS product identifier</b>	Methyl Bromide
<b>Chemical name</b>	bromomethane
<b>Other means of identification</b>	Methane, bromo-; Bromomethane; Curafume; Embafume; Halon 1001; Haltox; Iscobrome; Monobromomethane; Terabol; CH3Br; Bercema
<b>Product use Synonym</b>	Synthetic/Analytical chemistry. Methane, bromo-; Bromomethane; Curafume; Embafume; Halon 1001; Haltox; Iscobrome; Monobromomethane; Terabol; CH3Br; Bercema
<b>SDS #</b>	001035
<b>Supplier's details</b>	Electronic Fluorocarbons 3266 Bergey Road Hatfield PA 19440
<b>Emergency telephone number</b>	1-800-535-5053
<b>Outside the US (call collect)</b>	Outside the US: 1-352-323-3500 (Call collect)

### \*\*\*Section 2 - HAZARDS IDENTIFICATION\*\*\*

<b>OSHA/HCS status</b>	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
<b>Classification of the substance or mixture</b>	FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Compressed gas ACUTE TOXICITY (inhalation) - Category 2 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 GERM CELL MUTAGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS) and kidneys) - Category 2 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 HAZARDOUS TO THE OZONE LAYER - Category 1

#### GHS label elements

##### Hazard pictograms



##### Signal word

Danger

##### Hazard statements

Extremely flammable gas.  
May form explosive mixtures with air.  
Contains gas under pressure; may explode if heated.  
Fatal if inhaled.  
Causes serious eye irritation.  
Causes skin irritation.  
May cause respiratory irritation.  
Suspected of causing genetic defects.

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May cause damage to organs through prolonged or repeated exposure. (central nervous system (CNS), kidneys)  
Very toxic to aquatic life with long lasting effects.  
Harms public health and the environment by destroying ozone in the upper atmosphere.

## Precautionary statements

### General

Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction. Approach suspected leak area with caution.

### Prevention

Never Put cylinders into unventilated areas of passenger vehicles. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Wear respiratory protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe gas. Wash hands thoroughly after handling. Use and store only outdoors or in a well ventilated place.

### Response

Collect spillage. Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.

### Storage

Store locked up. Protect from sunlight. Protect from sunlight when ambient temperature exceeds 52°C/125°F. Store in a well-ventilated place.

### Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations. Refer to manufacturer/supplier for information on recovery/recycling.

### Hazards not otherwise classified

In addition to any other important health or physical hazards, this product may displace oxygen and cause rapid suffocation.

## \* \* \*Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS\* \* \*

Substance/mixture	Substance
Chemical name	bromomethane
Other means of identification	Methane, bromo-; Bromomethane; Curafume; Embafume; Halon 1001; Haltox; Iscobrome; Monobromomethane; Terabol; CH3Br; Bercema

### CAS number/other identifiers

CAS number : 74-83-9  
Product code : 001035

Ingredient name	%	CAS number
bromomethane	100	74-83-9

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

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## \*\*\*Section 4 - FIRST AID MEASURES\*\*\*

### Description of necessary first aid measures

<b>Eye contact</b>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
<b>Inhalation</b>	Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Skin contact</b>	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Ingestion</b>	As this product is a gas, refer to the inhalation section.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

<b>Eye contact</b>	Causes serious eye irritation. Contact with rapidly expanding gas may cause burns or frostbite.
<b>Inhalation</b>	Fatal if inhaled. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
<b>Skin contact</b>	Causes skin irritation. Contact with rapidly expanding gas may cause burns or frostbite.
<b>Frostbite</b>	Try to warm up the frozen tissues and seek medical attention.
<b>Ingestion</b>	Irritating to mouth, throat and stomach. As this product is a gas, refer to the inhalation section.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	Adverse symptoms may include the following: respiratory tract irritation coughing
<b>Skin contact</b>	Adverse symptoms may include the following: irritation redness
<b>Ingestion</b>	No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

<b>Notes to physician</b>	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Specific treatments</b>	No specific treatment.
<b>Protection of first-aiders</b>	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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## \*\*\*Section 5 - FIRE FIGHTING MEASURES\*\*\*

### Extinguishing media

**Suitable extinguishing media** Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** None known.

### Specific hazards arising from the chemical

Contains gas under pressure. Extremely flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

### Hazardous thermal decomposition products

Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
halogenated compounds  
carbonyl halides

### Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so.

### Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## \*\*\*Section 6 - ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Accidental releases pose a serious fire or explosion hazard. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### Environmental precautions

Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

### Methods and materials for containment and cleaning up

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<p><b><u>Reportable quantity</u></b> 1000 lbs / 454 kg Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.</p> <p><b><u>Limited quantity</u></b> Yes.</p> <p><b><u>Packaging instruction</u></b></p> <hr/> <p><b><u>Passenger aircraft</u></b> Quantity limitation: Forbidden.</p> <p><b><u>Cargo aircraft</u></b> Quantity limitation: Forbidden.</p> <p><b><u>Special provisions</u></b> 3, B14, T50, 153</p>			Forbidden
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**“Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product.”**

**Special precautions for user**    **Transport within user’s premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**    Not available.

**\*\*\*Section 15 - REGULATORY INFORMATION\*\*\***

**U.S. Federal regulations**    **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** This material is listed or exempted.  
**Clean Water Act (CWA) 307:** bromomethane

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)**    Listed

**Clean Air Act Section 602 Class I Substances**    Listed

**Clean Air Act Section 602 Class II Substances**    Not listed

**DEA List I Chemicals (Precursor Chemicals)**    Not listed

**DEA List II Chemicals (Essential Chemicals)**    Not listed

**SARA 302/304**

**Composition/information on ingredients**

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Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
bromomethane	100	Yes.	-	-	-	-

**SARA 304 RQ** Not applicable.

**SARA 311/312**

**Classification** Fire hazard  
 Sudden release of pressure  
 Immediate (acute) health hazard  
 Delayed (chronic) health hazard

**Composition/information on ingredients**

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
bromomethane	100	Yes.	Yes.	No.	Yes.	Yes.

**SARA 313**

	Product name	CAS number	%
<b>Form R - Reporting requirements</b>	bromomethane	74-83-9	100
<b>Supplier notification</b>	bromomethane	74-83-9	100

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

**State regulations**

- Massachusetts** This material is listed.
- New York** This material is listed.
- New Jersey** This material is listed.
- Pennsylvania** This material is listed.
- California Prop. 65**

**WARNING:** This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
bromomethane	No.	Yes.	No.	810 µg/day (inhalation)

**Canada inventory** This material is listed or exempted.

**International regulations**

- International lists**
- Australia inventory (AICS):** This material is listed or exempted.
  - China inventory (IECSC):** This material is listed or exempted.
  - Japan inventory:** This material is listed or exempted.
  - Korea inventory:** This material is listed or exempted.
  - Malaysia Inventory (EHS Register):** Not determined.
  - New Zealand Inventory of Chemicals (NZIoC):** This material is listed or exempted.
  - Philippines inventory (PICCS):** This material is listed or exempted.
  - Taiwan inventory (CSNN):** Not determined.

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**Chemical Weapons Convention List Schedule I Chemicals** Not listed

**Chemical Weapons Convention List Schedule II Chemicals** Not listed

**Chemical Weapons Convention List Schedule III Chemicals** Not listed

## Canada

**WHMIS (Canada)** Class A: Compressed gas.  
Class D-1A: Material causing immediate and serious toxic effects (Very toxic).  
Class D-2B: Material causing other toxic effects (Toxic).  
Class E: Corrosive material

**CEPA Toxic substances:** This material is listed.

**Canadian ARET:** This material is not listed.

**Canadian NPRI:** This material is listed.

**Alberta Designated Substances:** This material is not listed.

**Ontario Designated Substances:** This material is not listed.

**Quebec Designated Substances:** This material is not listed.

## Section 16. Other information

**Canada Label requirements** Class A: Compressed gas.  
Class D-1A: Material causing immediate and serious toxic effects (Very toxic).  
Class D-2B: Material causing other toxic effects (Toxic).  
Class E: Corrosive material

**NFPA Ratings: Health: 2 Fire: 4 Reactivity: 3**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

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## **Other Information**

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